



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029**

Ms. Barbara S. Taylor, Director  
Office of Environmental Health  
West Virginia Department of Health and  
Human Resources  
Capitol and Washington Streets  
1 Davis Square, Suite 200  
Charleston, West Virginia 25301-1798

Dear Ms. Taylor:

Enclosed is the U.S. Environmental Protection Agency Region III (EPA) review of the West Virginia drinking water program for State Fiscal Year 2012. This review covers the Public Water System Supervision Program (PWSS).

The enclosure consists of a comprehensive report and the Semi Annual SFY 2011 Program Guidance/Reporting Checklist and evaluation tool (without attachments). This review incorporates information from the semi-annual progress reports submitted by the West Virginia Environmental Engineering Division (EED), telephone and email follow-up, and communication within EPA covering the activities from July 1, 2010 through June 30, 2011

EPA would like to recognize West Virginia's drinking water program on its success in obtaining primacy for the Lead and Copper Rule Short Term Revisions and Ground Water Rule. However EPA does have concern with the high turnover of staff within EED. This is discussed further in the report.

In addition to the shared responsibility placed on responding to acute health contaminants at all public water systems, EPA will focus FY 2012 program activities on the continuation of emergency preparedness, new rule development and adoption, continuation and improvement of operator certification programs and continued improvement of data quality in SDWIS. EPA is committed to working with you on these activities to achieve these goals. If you have any questions regarding the enclosed review, please do not hesitate to call me at (215) 814-5757 or have your staff contact Wanda F. Johnson at (215) 814-3249.

If you have any questions regarding the enclosed report, please do not hesitate to call me at (215) 814-5757 or have your staff contact Wanda F. Johnson at (215) 814-3249.

Sincerely,

Victoria P. Binetti, Associate Director  
Office of Drinking Water & Source Water  
Protection (3WP30)

Enclosures

bcc (without encls.):

W. Johnson (3WP21)

A. Meadows (3WP21)

M. Brewster (3WP50)

J. Pine (3WP30)

M. Conicelli (3WP22)

Is anyone missing from this list?

**Review of the  
West Virginia Department of Health and Human Resources  
Bureau of Public Health  
Office of Environmental Health Services  
Environmental Engineering Division  
Federally Funded Drinking Water Activities**

## Introduction

This review covers the activities conducted under Public Water System Supervision Program (PWSS), Drinking Water State Revolving Fund (DWSRF) set-aside funded activities, Water Protection Coordination (Security) and Operator Certification Expense Reimbursement Grant federally funded assistance agreements. The report is presented in two parts: 1) a discussion of the Environmental Engineering Division (EED) strengths and those areas where the EPA has concerns, as well as any recommendations, and 2) a detailed checklist that provides the mid-year status on each commitment/activity for the EED. WVDHHR is invited to submit an addendum to this report if it deems that such an addendum is necessary to clarify or counter EPA's findings.

## Purpose of Review

The purpose of this review is to highlight program strengths, areas of progress, and significant accomplishments as well as indicate areas of concern regarding WVDHHR's performance. Where an "Action Item" is identified, EPA will require a response no later than one month after receipt of this report unless specified otherwise. This review is also intended to:

- 1) ensure that the commitments contained in the work plan/application under the grant awards are being performed on schedule,
- 2) ensure that all programmatic terms and conditions are met,
- 3) assess available funding to ensure commitment/activity completion,
- 4) ensure all programmatic, statutory and regulatory requirements are met, and
- 5) ensure equipment purchased under the award is accounted for and properly managed.

## Method of Review

This is a review of submitted progress reports from WVDHHR for State Fiscal Year 2011 and Summary of the 2011 WV Assessment from on-site interviews. Consultation included conversations with EPA's Drinking Water Branch, the Office of Standards, Assessments and Information Management, the Office of Infrastructure and Assistance, the Office of Analytical Services and Quality Assurance, Confidential Business Info staff and additional telephone conversations and email follow-up between EPA and WVDHHR.

## Contents of this Report

- PWSS Grant
- PWSS Program Activities
- Conclusion, Action Items and Reminders

## **Public Water System Supervision (PWSS) Program**

### **Financial Summary**

EPA approved WVDHHR's SFY'13 PWSS grant in the amount of \$828,500. To date, two partial awards have been made for a total of \$622,500 or 75% awarded. WVDHHR submitted the final FFR for SFY 2012 to EPA. A surplus of \$13,265.60 has been reported. EPA has requested de-obligation and recertification of these funds for use by the state which will supplement possible budget cuts of any future federal state allotments.

### Future Funding

In light of previous federal budget rescissions and the potential for future federal budget cuts, EPA advises WVDHHR to monitor spending closely. When projecting budgets for future PWSS grants, the state should continue to plan appropriately and utilize funds efficiently. Each year, EPA works closely with WVDHHR to ensure that grant funds can be provided as early as possible for state use. EPA is working closely with the EED to ensure timely submission of semi-annual progress reports and future grant applications.

### Personnel/Staffing

WVDHHR's EED has been experiencing significant staff turnover. The majority vacancies are due to promotion mobility while some vacancies have been due to retirement, resigned from state government or transferred to another state agency. This turnover poses significant challenges in keeping staff sufficiently trained and able to make decisions that are consistent with EED's daily operations and directions. However, WVDHHR is diligent in its efforts to backfill this vacancies and ensure proper coverage of workload.

### Reporting Reminder

WVDHHR is reminded to continue reporting on staffing levels especially where vacancies affect work plan activities (e.g., compliance, conducting training and sanitary surveys). This should be a separate narrative or included in progress reports consisting of: 1) a written summary of the status on filling each vacancy (i.e., reviewing applications, interviewing, etc.) and desired time frame for filling positions; 2) a current organization chart to show stability of staffing levels; and 3) a list showing the funding source for all FTEs (filled and vacant), with positions associated to funding source (i.e., PWSS, DWSRF set-aside grant funds, state funds, etc.).

## New Regulation Development

### Highlight

In May 2012 EPA made a Report to Congress: Radon in Drinking Water Regulations. To date, there has been no progress toward a final rule.

WVDHHR is current on adoption of all SDWA Regulations. The state plans to continue adopting all federal rules by reference, whenever feasible and as soon as practical.

### Groundwater Under the Direct Influence (GUDI) Determinations

GUDI determinations continue to be a priority for the state. WVDHHR's GUDI status of new systems activated or testing new wells after 2004 are; six (6) CWS, eight (8) NTNCs and nineteen (19) TNCs.

### Recommendation

EPA recommends that WVDHHR conduct GUDI determinations on new water sources prior to these systems going on-line.

### Reporting Reminder

Continue to provide status of GUDI determinations for all new sources that became active after January 1, 2004, in the semi-annual progress reports.

## Capacity Development

Program activities continue in accordance with the workplan and at a satisfactory level to the Regional Capacity Development Coordinator.

On April 30, 2012, EPA approved the implementation of WVDHHR's Capacity Development Program (CDP). Each year a determination is made as to whether the state's program meets EPA guidance. This determination influences the decision to withhold 20% of the state's Drinking Water State Revolving Fund capitalization grant.

## New Systems

WVDHHR maintains a list that tracks the compliance status of new systems that started operation during the previous three fiscal years (October 1, 2009 through September 30, 2012).

Twelve systems started operation within the last three years (seven within the last year). But one system closed so there are only 11 new systems. The only system (Brooks Run Mining, WV9955101) that had an ETT score of above 10 last year returned to compliance early in FY2012. This success in operational compliance can be attributed to the diligence of the District Engineers and enforcement staff in working with these new systems to ensure that they understand the reporting and sampling requirements.

The State has been discovering systems which started without the State's knowledge and approval. The State is pursuing those systems to comply with state requirements and probably legal action!

The new systems permitting process is discouraging small, new water systems and encouraging proposed systems to connect to or to become part of existing, larger, more viable water systems. Through this process, new systems commonly begin to understand how complex running a water system is and partner with or connect to an existing, more viable system when possible. This is effective in preventing the formation of non-viable PWSs.

## **Existing Systems**

Since its initial baseline conducted in 2002, WVDHHR has provided an update every three (3) years to help evaluate the CDP. The most recent update was in 2011. The data which are used to measure improvement in system capacity showed that existing system's assessment activities were having a positive impact on water systems.

The 2011 baseline ranking data showed 435 (73%) community and NTNC water systems in West Virginia are viable systems; 118 (20%) are marginal and 39 (7%) are failing. Viable water systems serve 1.4 million (94%) of the population while failing and marginal systems serve 96,497 (or 6%) of the population.

WVDHHR continues to provide assistance to water systems by conducting Capacity Development Assessments (CDA) - a complete evaluation of their technical, managerial, and financial (TMF) capabilities and needs. WVDHHR provides recommendations to address those needs which will lead to long term viability. The CDP continues to focus on making the reports more "reader friendly" and helpful to the water systems.

Over the years, WV has shifted resources within its program to provide more pro-active water system assistance and focus on assessment follow-up and assistance. WV intends to have its entire staff involved in follow-ups to provide more effective assistance to water systems and to minimize, as much as possible, disruptions in assistance caused by personnel changes. During FY2012, 29 additional water systems were assessed. Some assessments included multiple water systems having separate PWSID numbers, although, they were counted as one CDA.

Additional assistance provided by WVDHHR to water systems through field staff and the Capacity Development Team include a variety of activities related to the Area Wide Optimization Program, the Consumer Confidence Report, asset management, emergency response plans, Disinfection Byproduct Rule, etc.

## **Highlight**

The Capacity Development staff made extraordinary efforts in working with systems that were historically poor performers; those having failing baseline scores and a history of non-compliance to help them achieve viability. Staff made frequent phone calls to the systems, showed up onsite, or attended meetings of the residents, etc. The CDP staff work diligently to assist those struggling systems including aligning them with other more viable systems for merger.

WVDHHR has continued with its Capacity Assistance Partnership Developing Essential Viability (CAPDEV) outreach initiative. CAPDEV is the second phase of the CDP; the first

phase is the CDA. Through CAPDEV, West Virginia is encouraging water system cooperation, personnel and/or equipment sharing agreements, and full or partial consolidation.

West Virginia requires all DWSRF recipients to participate in a 14-month program to guide them through asset management development. A 14 month timeline has been developed to help systems develop their plans in manageable chunks and review of plan components are occurring as various plan components are developed during the 14 months.

- As of September 30, 2012, 26 systems were participating.
- Funding is also being made available to water systems to secure the services of engineering firms to assist with the asset management plan development.

In addition to direct contact while conducting CDAs and follow-up assistance activities, CDP staff provides training to water system operators by teaching various courses to including backflow prevention, water well drilling and pump installation.

Third party assistance providers assist water systems through on-site, hands-on assistance; workshops; seminars and training sessions; and self-help guidance documents.

WVDHHR, thru its participation in the Drinking Water Education and Training Coalition developed a comprehensive annual training calendar. More than 3,000 calendars were printed and distributed.

In FY2012, CDP staff continued to work with the National Environmental Services Center (NESC) in developing, with CDP oversight and review, two important water system assistance tools/programs using sub-recipient grant funds. These tools/programs are:

- West Virginia Water System Utility Management Institute Training (WVWSUMIT) and;
- West Virginia Water System Evaluation Tool (WVWSET).

### **System Compliance Tracking Through ETT**

West Virginia started utilizing the Enforcement Targeting Tool (ETT) to target compliance assistance to those systems with an elevated ETT score. The EPA requires that OEHS take action on systems with an ETT score  $\geq 11$ . WV started to target those systems that have not yet reached the actionable score assigned by EPA. The Compliance and Enforcement (C&E) staff is pushing systems that are on the cusp of reaching the action level (those with an ETT score  $> 8$ ) to begin proactive measures that will remedy violations and lower their ETT score.

Starting in FY 2012, with input from the district engineers, the C&E staff are now working hand in hand with CDP staff to identify by both the ETT score ( $\geq 11$ ) and the baseline score (marginal or upper failing scores) those systems that will be targeted for an assessment. These “struggling” systems will be the focus of a single staff member whose task will be to help identify these system’s TMF deficiencies along with defining a reason for their inability to remain in compliance. Once the analysis has been completed, this staff member is responsible for assisting that system to attain and maintain compliance, build TMF, and improve overall system sustainability. A maximum of 6 systems per quarter will be assigned for assessment and regular progress updates will be provided by CDP staff for inclusion in reports to EPA.

DWTRF Funding Distribution including small and disadvantaged systems

To date, eighty (80) loans totaling in excess of \$156 million dollars have been disbursed for water system upgrades in West Virginia. In FY 2012, the average population served for projects

funded was 6,420. More than 90% of systems in West Virginia meet the EPA definition of a small system (<10,000 customers).

### Source Water Assessment & Protection Programs

The West Virginia Department of Health and Human Resources (WV DHHR) continues to increase the number of source water protection activities implemented in the state. The Source Water Protection Technical Help Program (SWPTHP) has proved to be successful with 164 community water systems completing protection plans. The Program was able to achieve these results through contracts with two engineering firms, Potesta, Inc. and Tetra Tech. West Virginia also continues to assist many surface water and ground water community public water systems through source water protection grants. A website for the State's Office of Environmental Health Services provides information on WV's Source Water Assessment Program (SWAP) and Wellhead Protection Program and includes fact sheets, SWAP posters, general information and a listing of SWAP educational courses.

### Highlights

- The Source Water Team actively participated in meetings and activities with the River Alert Information Network (RAIN), the Ohio River Valley Water Sanitation Commission (ORSANCO) and the Potomac River Basin Drinking Water Source Protection Partnership.
- Continued to work with and revise the Source Water Protection GIS website which provides source water information to public water systems, federal and local agencies as well as other state programs and agencies.
- WV DHHR's SWPTHP program has assisted 164 public water systems with the development of protection plans

### Action Items

EPA would like to be kept informed of Source Water Protection Technical Help Program (SWPTHP) contract work progress.

### Recommended Activities for WV DHHR

- Share WV digitized source water protection areas with EPA
- Share with EPA a list of the water systems that have achieved substantial implementation in WV.

### Data Management/Data Analysis

WVDHHR is submitting SDWIS data timely each quarter. They have upgraded their FedRep software to version 3.4 since the Aug 2012 report. Most data corrections have been made. There is still several violation and enforcement related errors that could be corrected. These are identified in their last SDWIS/ODS error reports from February 2013. Overall, EPA is very pleased with their data efforts.



Region 3's commitment to EPA HQ's is to address or resolve 230 high priority systems from the SDWIS July 2012 Enforcement Targeting Tool (ETT). The total count for WVDHHR on this list is 87. The SDWIS January 2013 ETT shows that the state has addressed or resolved 44 systems, which is 51% of the July 2012 ETT list.

EPA and WVDHHR have quarterly conference calls to discuss the status of the PWS systems on the ETT List. Any cases needing EPA compliance assistance are referred to EPA during these calls.

#### Concern

As a result of the 2008 on-site Data Verification, one major concern is implementation for Stage 1 DBPR and LT1 ESWTR which were noted in the report as not being fully implemented by the state. Discrepancies noted for these two rules are for compliance determinations for monitoring and reporting. The state attributes its problems in compliance determinations to a lack of staff and failure to inform compliance officers that they could utilize SDWIS State web release 1.0 (SSWR1) to compute compliance determinations. The compliance determination tool had not been working correctly in SDWIS/State. Since the state did not have the manpower to manually do calculations to determine compliance, violations were not issued.

#### Action Plan

To address this concern, EPA is providing an in-kind service contract via DWSRF 10% SetAside to provide various training and develop SOPs (standard operating procedures) for WVDHHR staff on SDWIS-State and NPDWR. The contract assists WVDHHR with addressing discrepancies from the 2008 on-site data review as well as developing a strategy to fully implementing both rules.

#### Action Item

EPA will continue to coordinate efforts to proceed with on-site training in April/May timeframe.

#### Annual Compliance Report

WVDHHR submitted its Annual Compliance Report (ACR) for 2011 in June 2012. This report provides much more detail than in the past (i.e., graphs for each rule showing violation trends over the past seven (7) years). This detail information will help identify program focus areas.

#### Laboratory Certification

In September 2012, an on-site review of WVDHHR's Drinking Water Laboratory Certification Program was conducted. This review included interviews, review of lab records/files, SOPs and an observation of the on-site laboratory assessment of microbiology by WV's Certification Officers, to determine the lab's capability to perform its mission as it relates to the Safe Drinking Water Act.

During October 2012 through March 2013, the WVDHHR Office of Laboratory Services (OLS) responded to EPA's report findings with a corrective action plan and supporting materials. The actions and documentation of implementation regarding the review team's findings have been found fully acceptable and the responses to the provided suggestions were very positive and appreciated.

### Highlight

In addition to having a plan for lab support for the WV DW program office in case of emergencies, this effort has also resulted in centralizing the responsibility of making sure PWSs have a listing of labs that are certified for the critical analytes/analyses. The WV Lab Cert Program within the OLS has been assigned this responsibility.

### Quality Management Plan (QMP)

WVDHHR's Drinking Water Program QMP is valid until December 2015.

### Operator Certification Program

#### Program Review

On September 27, 2012, EPA approved the implementation of WVDHHR's Operator Certification Program. Each year a determination is made as to whether the state's program meets EPA guidance. This determination influences the decision to withhold 20% of the state's Drinking Water State Revolving Fund capitalization grant.

### Highlights

WVDHHR solicited the assistance of a review committee to conduct an external review on the implementation of their Program. The external review is a requirement of the Operator Certification Guidelines and must be performed by an entity outside of the state program agency. This can be a contractor/consultant, board or committee of stakeholders, etc. A final report was submitted to EPA. Some noteworthy findings of the committee are:

- To ensure effective communication on current compliance related topics, WVDHHR staff will meet with Chief Operators on a regular basis. This will promote information sharing among operators and prove to be informative for state staff.
- The state's database was commended for its capacity to obtain pertinent information regarding the certified operators in the state.
- The mailing list for the Drips & Drops Newsletter should include the legally responsible authority of each water utility, not just the operator. This would help improve communication to council and public service district (PSD) board members.

Although state budgets nation-wide have affected travel dollars each year to attend workshops and training, WVDHHR continues to show support through attendance at various EPA forums,

i.e., the 2012 National Joint Program Conference for Operator Certification and Capacity Development and the EPA/State Eastern Regional Operator Certification Program Workshops. This reflects the state's commitment to improving the implementation of this Program.

#### Schedule Reminder

Annual Operator Certification Report is due June 30, 2013.  
National CAPDEV/OpCert Program Meeting – November 2013